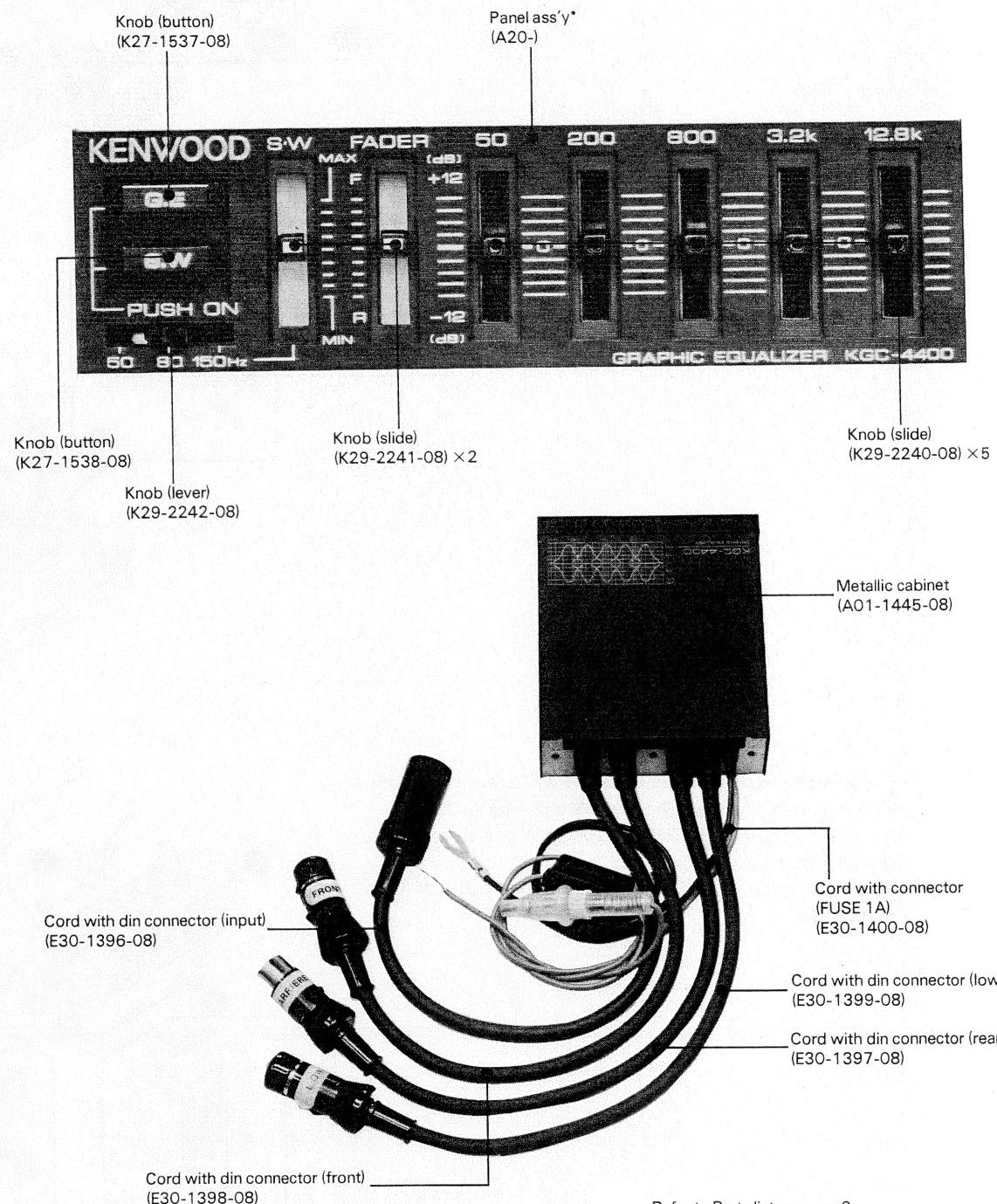


# SERVICE MANUAL

KENWOOD

**KGC-4400**

**GRAPHIC EQUALIZER**

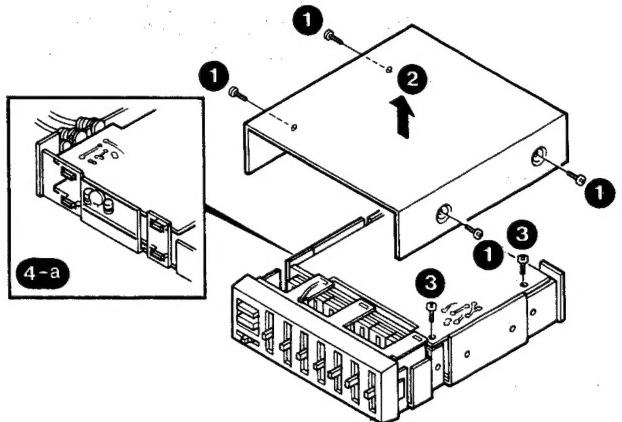


Refer to Parts list on page 6

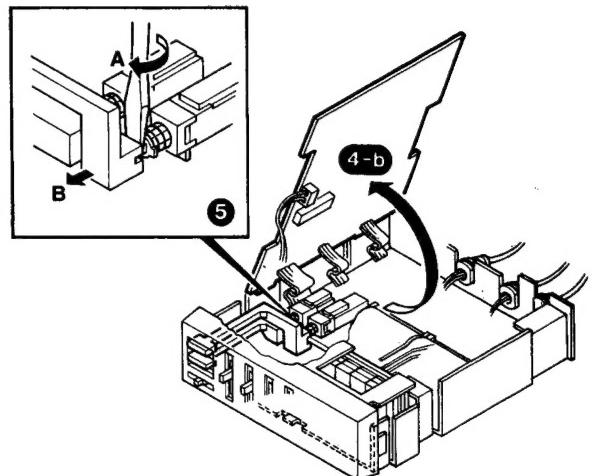
**KGC-4400**

## DISASSEMBLY FOR REPAIR

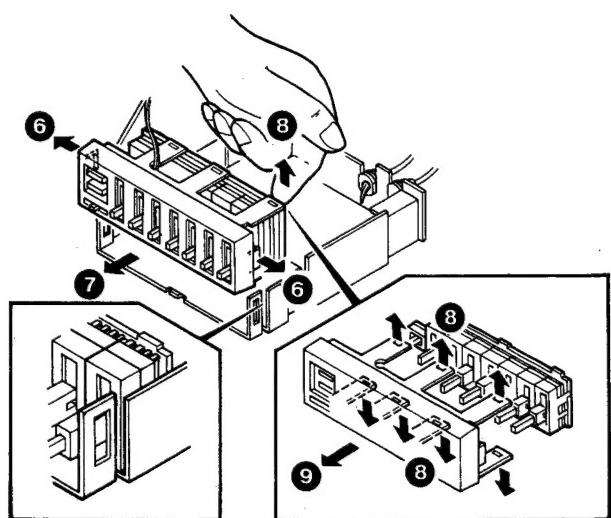
Remove metallic cabinet (① and ②), remove 2 screws (③). Release Main pcb (B/2) from chassis (—this pcb's projection is inserted in chassis (4-a and 4-b)).



Remove 2 knobs from switches (G.E. S.W) (⑤).



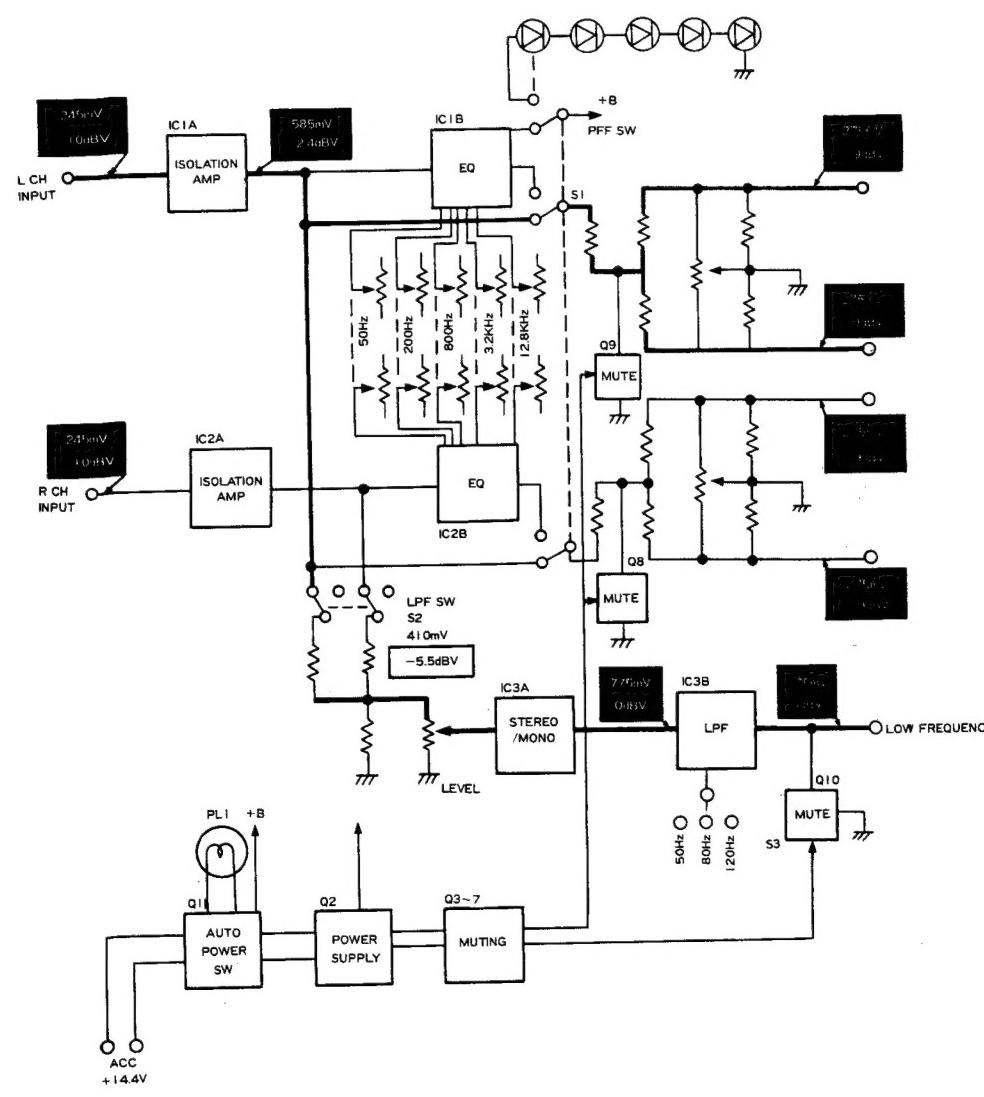
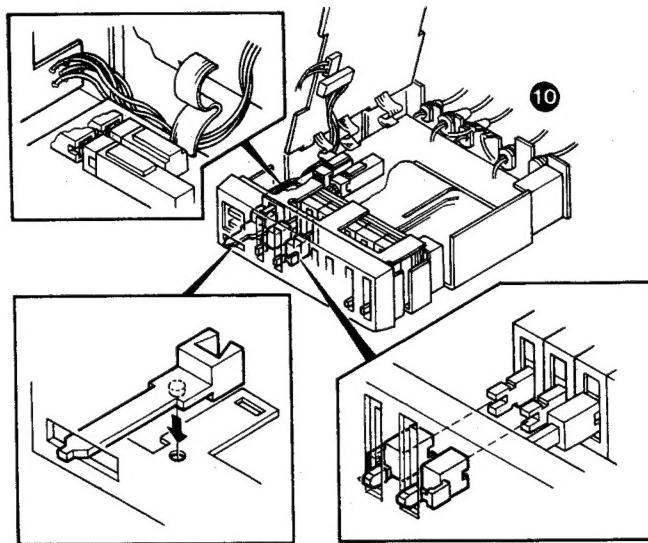
Draw out front panel onward slowly while removing both-side panel's hooks from chassis carefully (⑥ and ⑦). Remove 3 top-side hooks from Volume pcb's projection, then 4 bottom-side hooks (⑧). Pull front panel onward, holding Volume pcb side with hand (⑨).



# KGC-4400 KGC-4400

## DISASSEMBLY FOR REPAIR/BLOCK DIAGRAM

This figure (10) shows the caution concerning 3 knobs (FADER, S.W F select, S.W out) and wiring between S.W F select switch and Main pcb, when KGC-4400 is assembled.

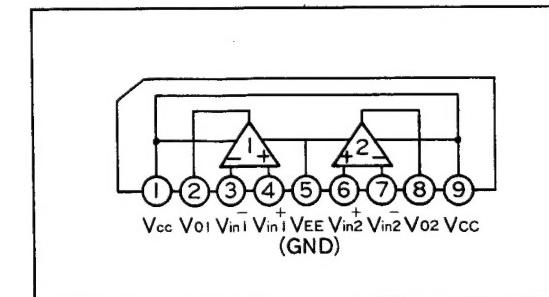


### Description of components Main unit (W02-0662-08)

Components	Function	Operation
Q1	Lamp and LED driver	ON when pin 3 of DIN (INPUT) is "H".
Q2	Ripple filter	
Q3	Mute driver (ON/OFF comparator)	OFF when mute is turned ON.
Q4	Mute driver (Switch for setting the OFF time)	ON when mute is turned ON.
Q5	Mute driver (Switch for setting the ON time)	OFF when mute is turned ON.
Q6	Mute driver (Inverter)	ON when mute is turned ON.
Q7	Mute driver (Driver)	ON when mute is turned ON.
Q8, 9, 10	Mute switch	ON when mute is turned ON.
Q11~20	Semiconductor inductor	
IC1A	Isolation amp.	
IC2A	Isolation amp.	
IC1B	EQ. amp.	
IC2B	EQ. amp.	
IC3A	Stereo/mono switch for sub-woofer system	
IC3B	L.P.F.	

IC1A~IC3B: AN6557

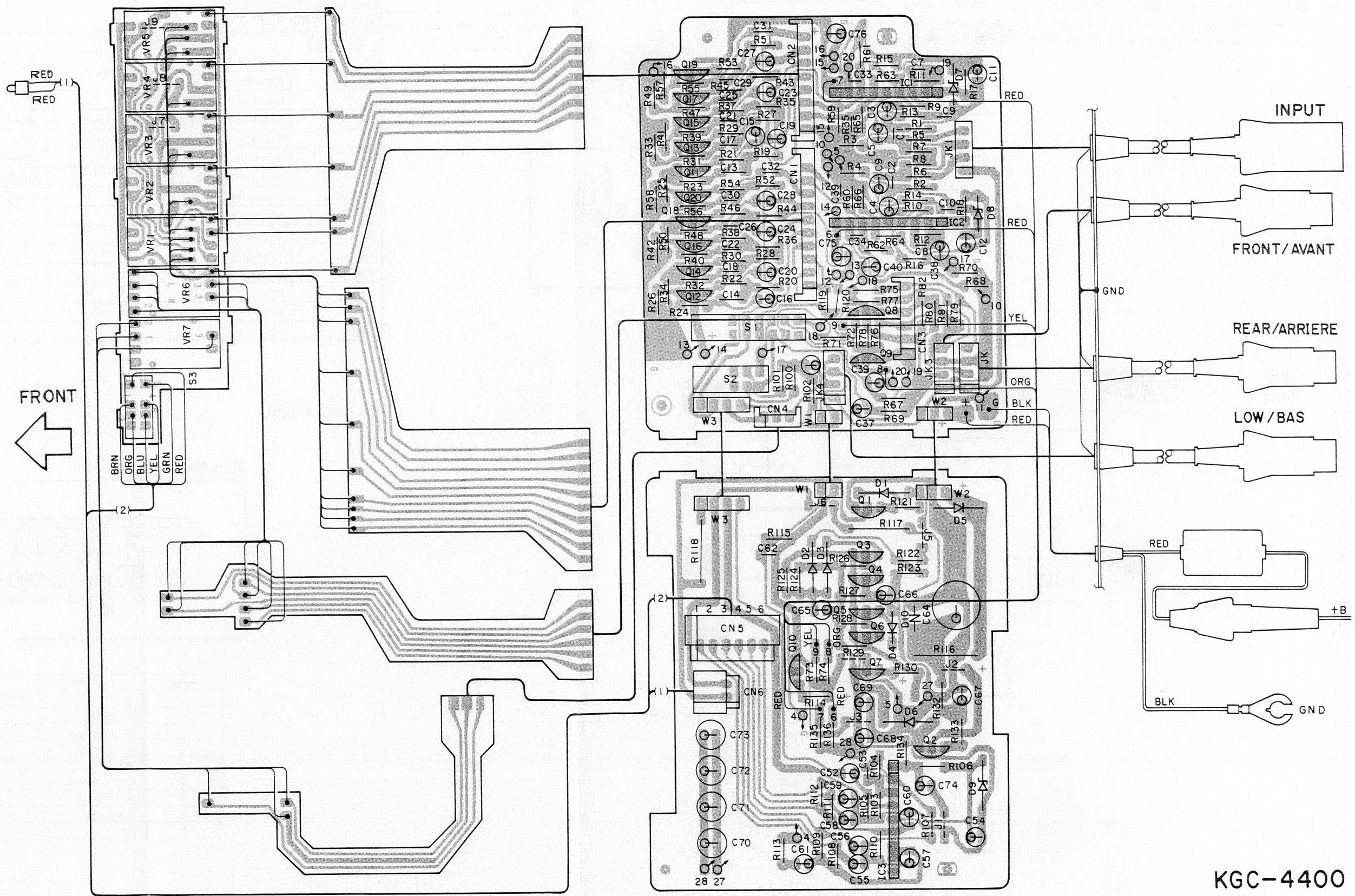
Block Diagram



Pin No.	Pin Name
1	Vcc
2	Ch.1 Output
3	Ch.1 Invert Input
4	Ch.1 Non Invert Input
5	VEE (GND)
6	Ch.2 Non Invert Input
7	Ch.2 Invert Input
8	Ch.2 Output
9	Vcc

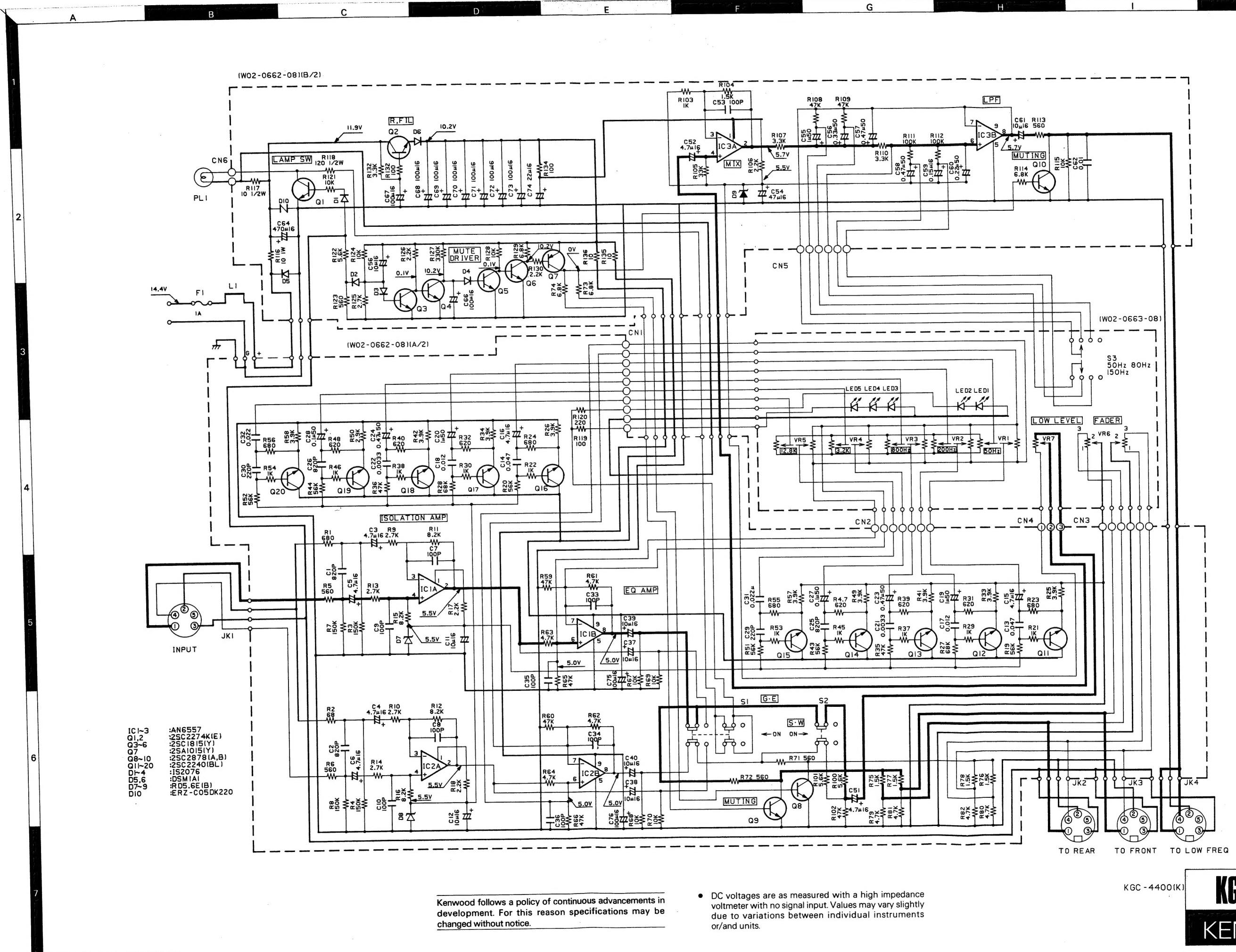
**KGC-4400**

## PC BOARD



KGC-4400

Refer to the schematic diagram for the values of resistors and capacitors.  
The PC board drawing is viewed from the side easy to check.



KGC-4400(K)

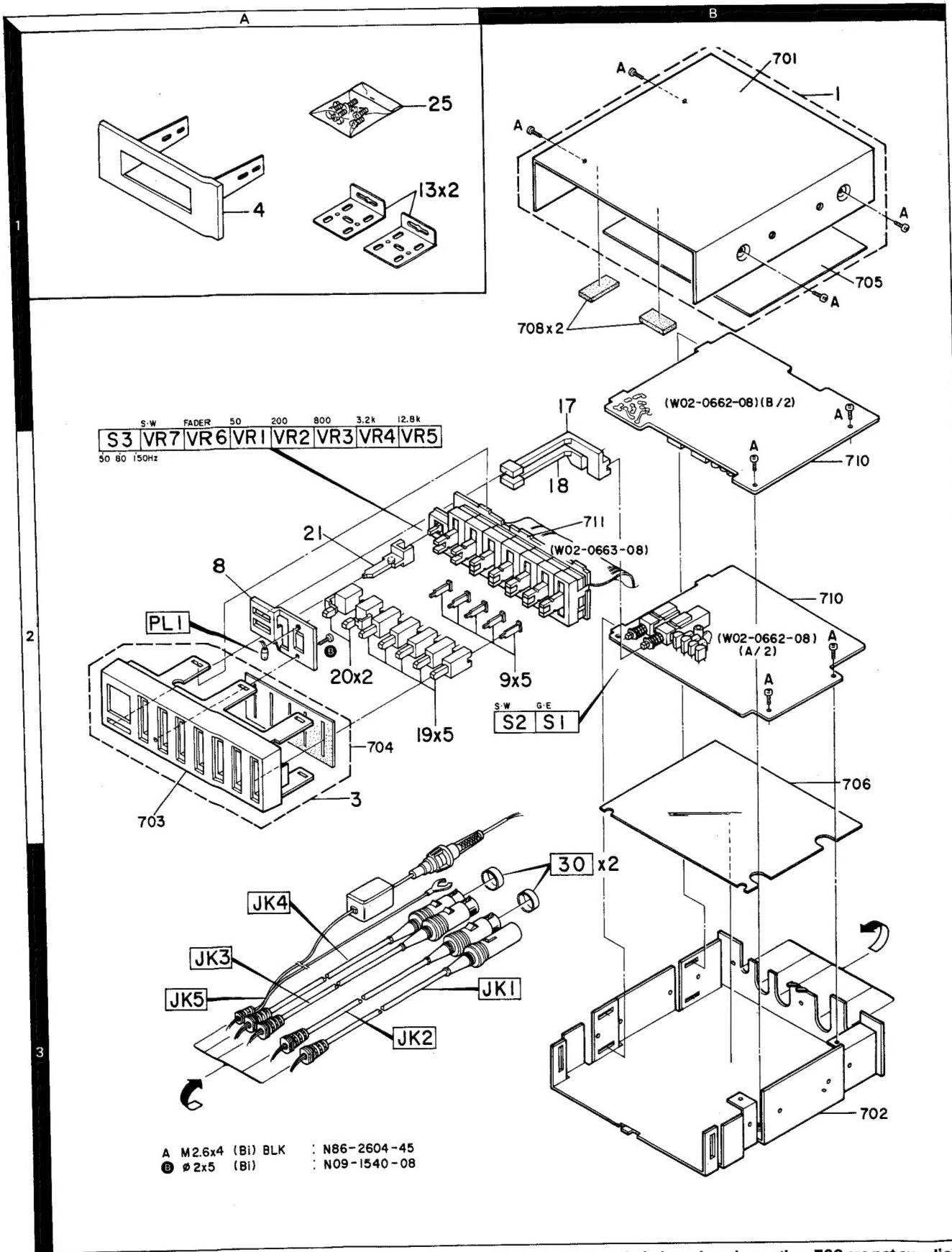
**KGC-4400**

**KENWOOD**

KGC-4400

KGC-4400

## EXPLODED VIEW



Parts with the exploded numbers larger than 700 are not supplied.

## PARTS LIST

\* New Parts

Parts without Parts No. are not supplied.

Les articles non mentionnés dans le Parts No. ne sont pas fournis.

Teile ohne Parts No. werden nicht geliefert.

Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規 格	Desti- nation 仕 向	Re- marks 備考
<b>KGC-4400</b>						
1	1B		A01-1445-08	METALLIC CABINET ASSY		
3	2A		A20-4616-08	PANEL ASSY	K	T
3	2A		A20-4617-08	PANEL ASSY		
4	1A		A21-0474-08	DRESSING PANEL		
8	2A		B11-0107-08	LIGHTING PLATE (A)		
9	2B		B19-0376-08	LIGHTING PLATE (B)	K	T
-			B46-0100-08	WARRANTY CARD		
-			B46-0123-00	WARRANTY CARD	K	K
-			B50-5842-00	INSTRUCTION MANUAL		T
-			B50-5990-00	INSTRUCTION MANUAL		
-			H01-5639-08	ITEM CARTON BOX,		
-			H03-0767-08	OUTER PACKING CASE		
-			H10-1821-08	POLYSTYRENE FOAMED FIXTURE		
-			H12-0194-08	PACKING FIXTURE		
-			H25-0239-08	PROTECTION BAG		
13	1A		J21-3693-08	MOUNTING HARDWARE		
17	2A		K27-1537-08	KNOB (BTN) G. E		
18	2A		K27-1538-08	KNOB (BTN) S. W		
19	2A		K29-2240-08	KNOB (SLIDE) EQ(50 -12.8KHZ)		
20	2A		K29-2241-08	KNOB (SLIDE) S. W BUT, FADER		
21	2A		K29-2242-08	KNOB (LEVER) S. W SELECT		
25	1A		N99-0201-08	SCREW SET		
	2A		N09-1540-08	SCREW (BI-TAP) Ø2X5		
<b>MAIN UNIT (W02-0662-08)</b>						
PL1	2A		B30-1110-08	LAMP		
C1 ,2			CK45B1H821K	CERAMIC	820PF	K
C3 ,6			CEO4CW1C4R7M	ELECTRO	4.7UF	16WV
C7 ,10			CC45SL1H101J	CERAMIC	100PF	J
C11 ,12			CEO4CW1C100M	ELECTRO	10UF	16WV
C13 ,14			CF92V1H473J	MF	0.047UF	J
C15 ,16			CEO4CW1C4R7M	ELECTRO	4.7UF	16WV
C17 ,18			CF92V1H123J	MF	0.012UF	J
C19 ,20			CEO4CW1H010M	ELECTRO	1.0UF	50WV
C21 ,22			CF92V1H332J	MF	3300PF	J
C23 ,24			CEO4CW1HR47M	ELECTRO	0.47UF	50WV
C25 ,26			CK45B1H821K	CERAMIC	820PF	K
C27 ,28			CEO4CW1H0R1M	ELECTRO	0.1UF	50WV
C29 ,30			CK45B1H221K	CERAMIC	220PF	K
C31 ,32			CF92V1H223J	MF	0.022UF	J
C33 ,36			CC45SL1H101J	CERAMIC	100PF	J
C37 ,40			CEO4CW1C100M	ELECTRO	10UF	16WV
C51 ,52			CEO4CW1C4R7M	ELECTRO	4.7UF	16WV
C53			CC45SL1H101J	CERAMIC	100PF	J
C54			CEO4CW1C470M	ELECTRO	47UF	16WV
C55			CEO4CW1H010M	ELECTRO	1.0UF	50WV
C56			CEO4CW1HR33M	ELECTRO	0.33UF	50WV
C57 ,58			CEO4CW1HR47M	ELECTRO	0.47UF	50WV
C59			CS15E1VR15M	TANTAL	0.15UF	35WV
C60			CEO4CW1HR22M	ELECTRO	0.22UF	50WV
C61			CEO4CW1C100M	ELECTRO	10UF	16WV

E: Scandinavia & Europe H: Audio Club K: USA P: Canada  
 S: South Africa T: England U: PX(Far East, Hawaii)  
 UE: AAFES(Europe) X: Australia M: Other Areas

⚠ indicates safety critical components.

## PARTS LIST

× New Parts

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Ref. No. 参照番号	Address 位 置	New Parts 新	Parts No. 部品番号	Description 部品名 / 規格	Desti- nation 仕向	Re- marks 備考
C62			CF92V1H103J	MF 0.010UF J		
C64			CE04DW1C471M	ELECTRO 470UF 16WV		
C65			CE04CW1C100M	ELECTRO 10UF 16WV		
C66 -73			C90-1263-05	ELECTRO 100UF 16WV		
C74			CE04CW1C220M	ELECTRO 22UF 16WV		
C75 ,76			C90-1263-05	ELECTRO 100UF 16WV		
JK1	3B		E30-1396-08	CORD WITH DIN CONNECTOR(INPUT)		
JK2	3B		E30-1398-09	CORD WITH DIN CONNECTOR(REA)		
JK3	3B		E30-1397-08	CORD WITH DIN CONNECTOR(FRONT)		
JK4	3B		E30-1399-08	CORD WITH DIN CONNECTOR(L&R)		
JK5	3B		E30-1400-08	CORD WITH CONNECTOR(FUSE 1A)		
30	3B		F29-0046-05	DIN CONNECTOR CAP		
R116			RS14DB3A100J	FL-PROOF RS 10° J 1W		
R117			RD14BB2H100J	RD 10 J 1/2W		
R118			RD14BB2H121J	RD 120 J 1/2W		
S1	1B		S40-2346-08	PUSH SWITCH (G.E.)		
S2	1B		S40-4069-08	PUSH SWITCH (S.W.)		
D1 -4			1S2076	DIODE		
D5 ,6			DSM1A1	DIODE		
D7 -9			RDS. 6E(B)	ZENER DIODE		
IC1 -3			AN6557	IC(OP AMP X2)		
Q1 ,2			2SC2274K(E)	TRANSISTOR		
Q3 -6			2SC1815(Y)	TRANSISTOR		
Q7			2SA1015(Y)	TRANSISTOR		
Q8 -10			2SC2878(A,B)	TRANSISTOR		
Q11 -20			2SC2240(BL)	TRANSISTOR		
<b>VOLUME UNIT (W02-0663-08)</b>						
VR1 -5	1A		R13-3028-08	POTENTIOMETER(20KBX2) EQ		
VR6	1A		R13-3029-08	POTENTIOMETER(10KWX2) FADER		
VR7	1A		R13-3030-08	POTENTIOMETER(10KBX2) S.W OUT		
S3	1A		S31-2098-08	SLIDE SWITCH (S.W F SELECT)		

E: Scandinavia & Europe H: Audio Club K: USA

P: Canada

S: South Africa

T: England

U: PX(Far East, Hawaii)

UE AAFES(Europe)

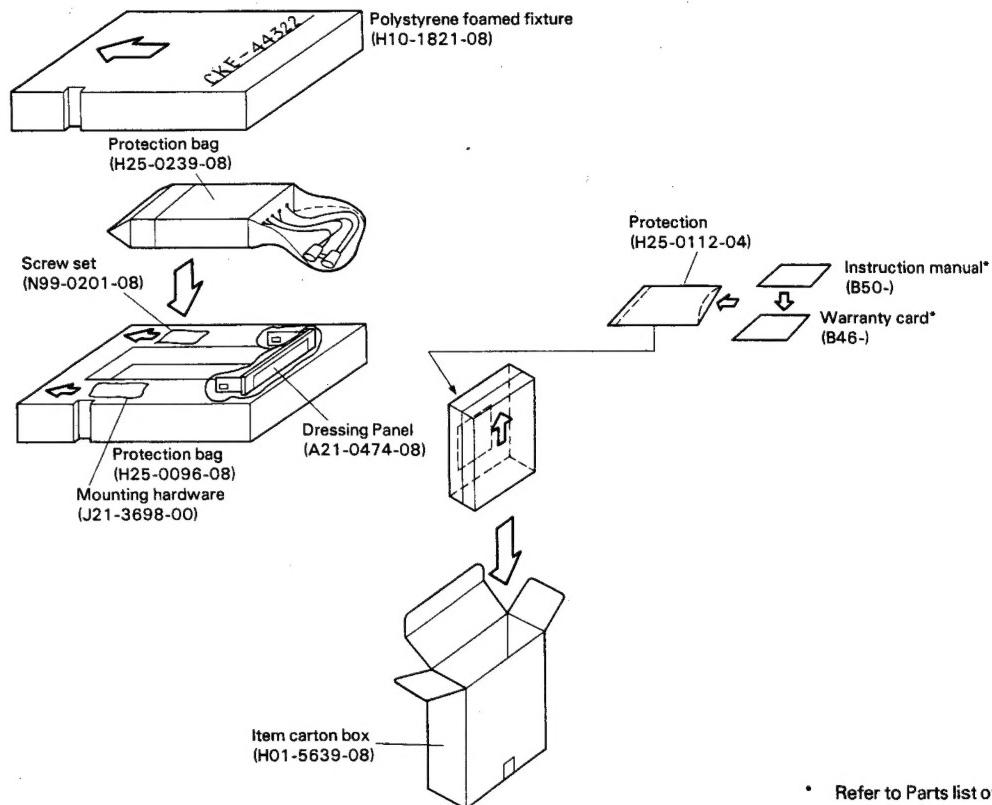
X: Australia

M: Other Areas

▲ indicates safety critical components.

# KGC-4400

## PACKING/SPECIFICATIONS



\* Refer to Parts list on page 6

## SPECIFICATIONS

Specifications subject to change without notice

### **Equalizer Section**

Equalizer Center Frequency	50 Hz, 200 Hz, 800 Hz, 3.2 kHz, 12.8 kHz
Equalization Range	±12 dB
Subwoofer Cut-off Frequency	50 Hz, 80 Hz, 150 Hz
Subwoofer Output Gain	—∞ ~ +10 dB
Subwoofer Cut-off Slope	12 dB/oct

### **Audio Section**

Input Impedance	10k Ω
Output Impedance	600 Ω
Signal to Noise Ratio	100 dB
T.H.D.	0.01%
Frequency Response Gain	20 Hz ~ 60 kHz (-3 dB) 0 dB

### **General**

Operating Voltage	14.4 V (11 ~ 16 V)
Current Consumption (MAX)	120 mA
Dimensions	89 (W) × 25 (H) × 110 (D)
Weight	0.4 kg

### **Note:**

Component and circuitry are subject to modification to insure best operation under differing local conditions. This manual is based on, the U.S. (K) standard, and provides information on regional circuit modification through use of alternate schematic diagrams, and information on regional component variations through use of parts list.

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